A CHAOTIC ATTRACTOR FROM AN AUTONOMOUS 3-SEGMENT PIECEWISE-LINEAR CIRCUIT(Theory of Dynamical Systems and Its Application to Nonlinear Problems)

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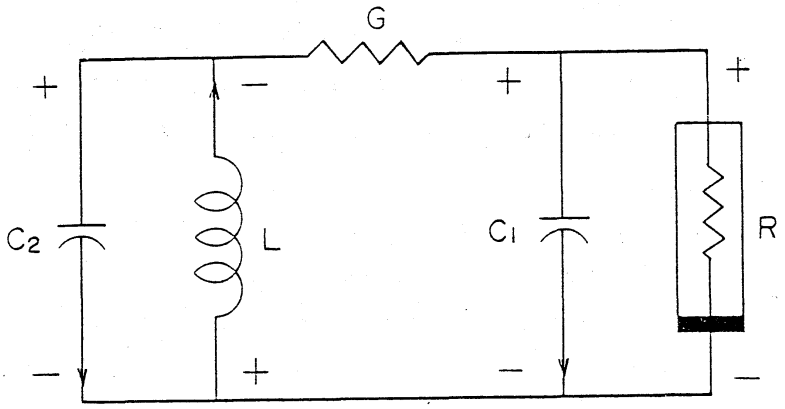
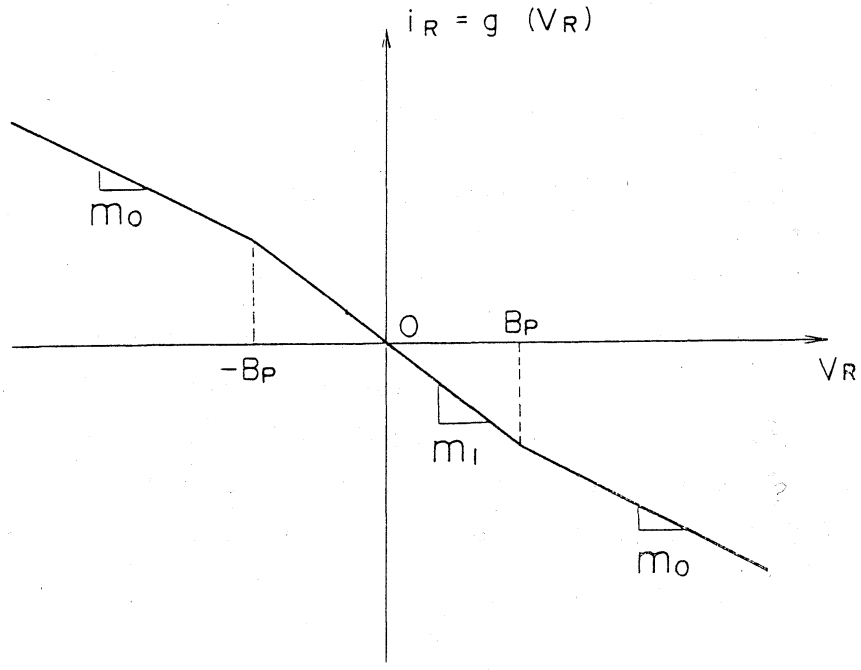
A B S T R A C T

A chaotic attractor has been observed with an extremely simple electrical circuit.

Consider the circuit of Fig. 1(a) where the nonlinear resistor is characterized by Fig. 1(b). With this simple circuit, a chaotic attractor of Fig. 2 has been observed. In addition to the sheet-like composition, the attractor has an interesting structure called the "double-scroll" structure. Details will be reported elsewhere.



(a)



(b)

Fig. 1

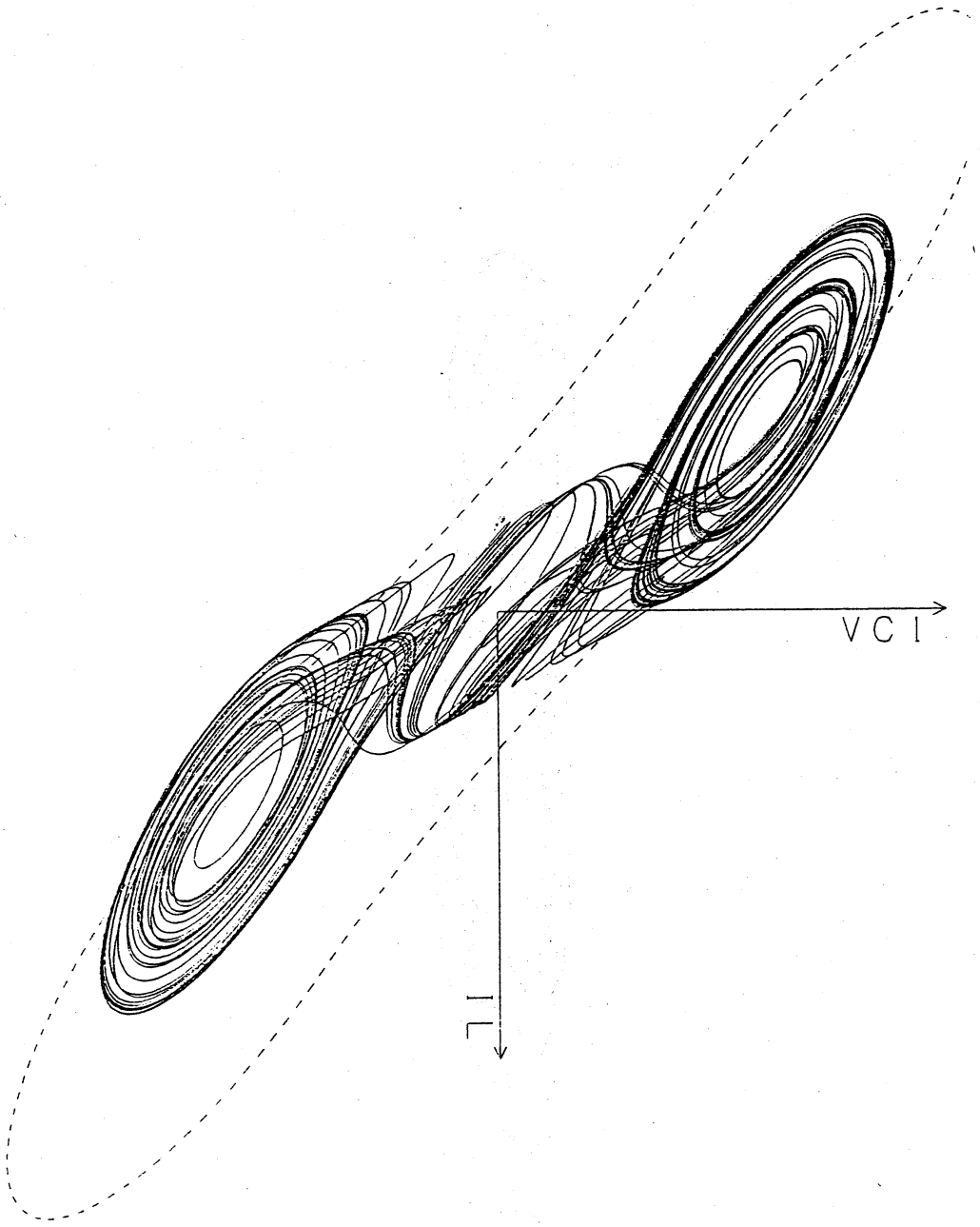


Fig. 2(a)

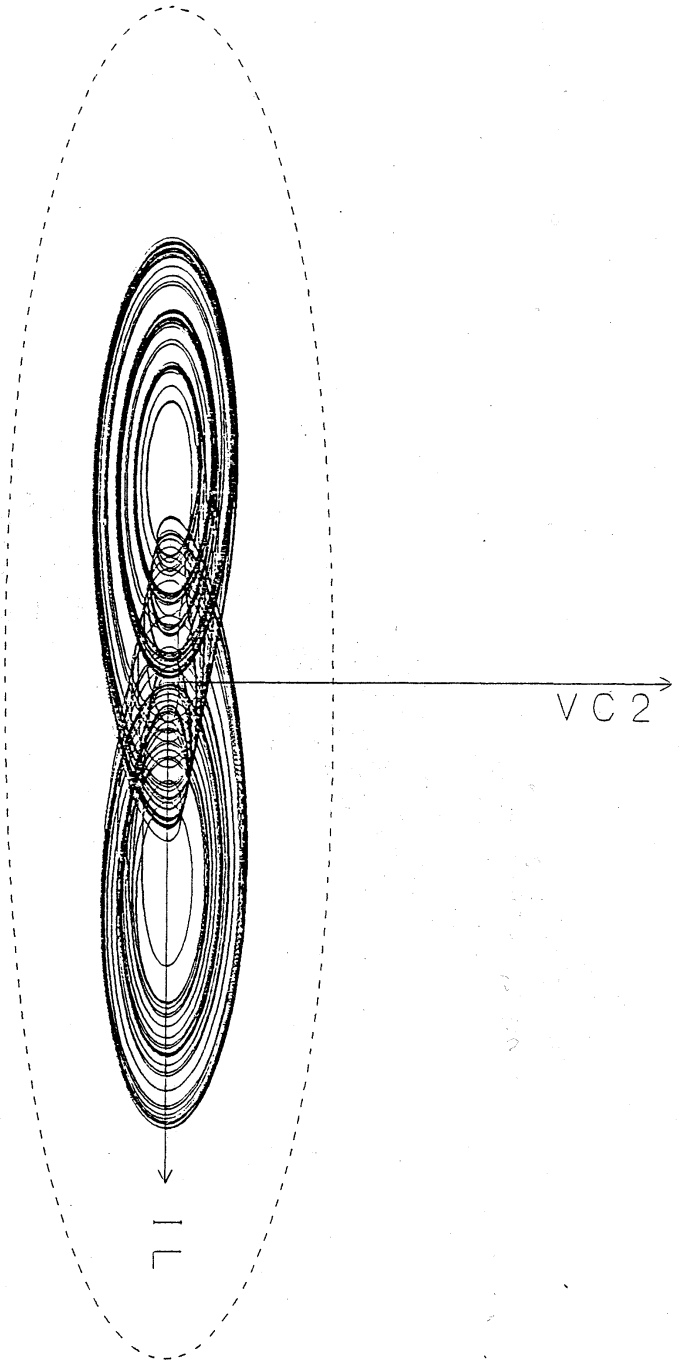


Fig. 2(q)

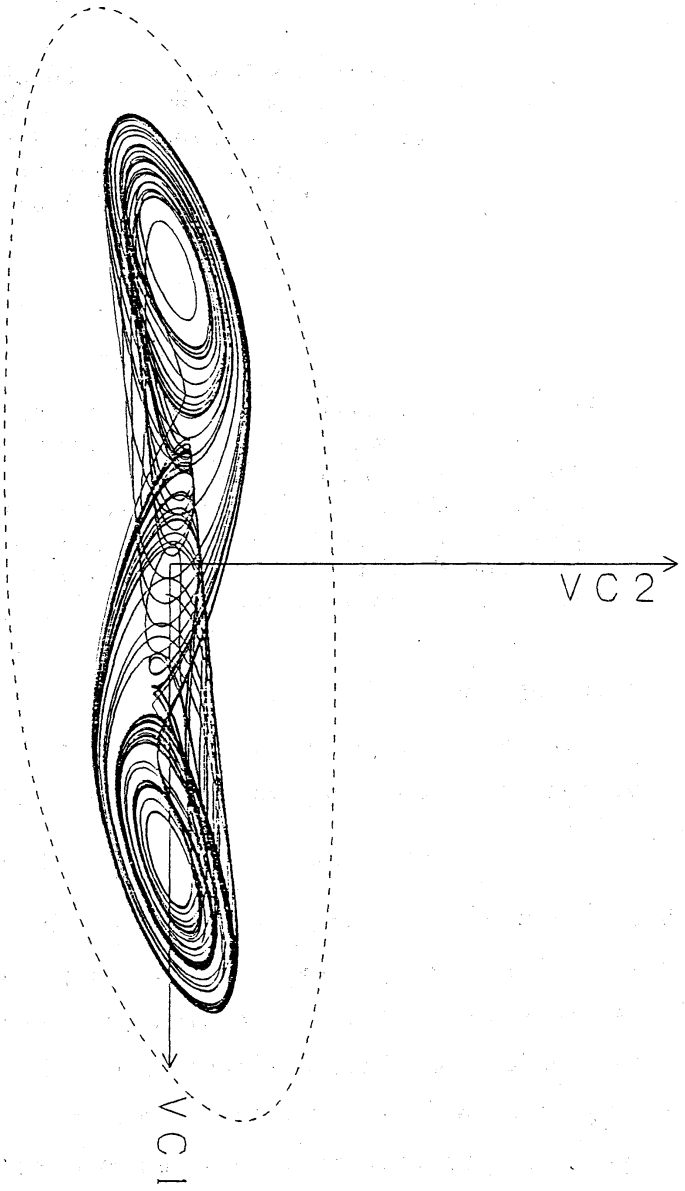


Fig. 2(c)